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ABSTRACT

The lead article discusses the results of a series of experiments in rural Alaska in which telemedicine was used to improve the delivery of health care to isolated populations. The author, Dennis Foote, also discusses the implications of these experiments for planning telemedicine systems in other areas. Satellite communication and a centralized computer based problem oriented medical record system played a major role in the project. A second article describes three educational endeavors in Tanzania: (1) Adult Education Year (1970); (2) Man is Health, a campaign designed to create an awareness of specific health problems among the rural population; and (3) Food is Life, a program to raise the level of functional literacy about the nutritional values of different foods. Also included are excerpts from a letter describing problems faced by a rural development communicator in India. (STS)

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TELEMEDICINE:

HEALTH CARE FOR ISOLATED AREAS

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Telemedicine: Health Care for Isolated Areas

Telemedicine, the systematic use of telecommunications in the delivery of health care, is one approach to solving the shortage of highly trained health care workers in rural areas. Telemedicine has received particular attention in recent years as a series of experiments have demonstrated ways in which communications can be used to extend, expedite, or improve health care. Most of the experiments have been designed for specialized institutional or urban environments, but one series of experiments in rural Alaska may provide an example of a way in which telemedicine can be used to improve the delivery of health care to isolated populations.

The following article by Dennis Foote of the Stanford Institute for Communication Research discusses the results of the Alaskan experiments and their implications for planning telemedicine systems in other areas. Dr. Foote and Dr. Heather Hudson, who also contributed to the preparation of this article, worked on the evaluations of the Alaskan experiments.

The problems faced by Alaska are similar to those faced by many developing countries. Alaska is huge and sparsely populated. Most of its 350,000 people and the majority of its health care services are concentrated in a few urban areas. Small Eskimo, Indian and Aleut villages are scattered throughout the State. Such villages typically have populations of 25 to 500 people. Few of these communities have telephone service, electricity, running water or sewage systems. Most can be reached only by plane or by boat during the summer.

The responsibility for the health care of Alaskan natives lies with the Indian Health Service (IHS), a part of the U.S. Public Health Service. IHS has for years maintained a system of small field hospitals located around the state, with a referral hospital in Anchorage, the state's largest city. However, villages are often cut off from the outside world and a system of primary local primary care had to be established. To provide this care, IHS trained native "health aides" who would work in their villages but be in direct communication with a field hospital.

Health aides are nominated for training by their communities and receive a maximum of 16 weeks training from the Public Health Service. This training is divided into several phases and is conducted in the field hospital and on-the-job. After a period of initial training, the health aide returns to his or her village with certain basic tools — a drug kit, instruments, a diagnostic reference manual, and a communication link to the nearest field hospital.

Doctors at the field hospital contact the village health aides each day for a scheduled consultation known as "doctor call". Contact is made using a two-way radio that allows the doctor and health aide to talk to each other, but not at the same time. All health aides in the same area use the same frequency and can hear the consultation between the doctor and the other health aides.

During these consultations, the health aide reports on the symptoms of the patients that he or she has seen that day and describes the management that has been given so far. The doctor asks for additional information, confirms or revises diagnoses or management plans, and gives instructions for additional care. Patients whose illnesses cannot be handled by the health aide are evacuated by plane to the nearest field hospital or clinic. If health aides need to contact the doctor outside of scheduled consultations, they can use an emergency signal.

The usual communication link for the program was a high-frequency (HF) radio, similar to the familiar airplane or taxicab radio. However, severe electrical interference, infrequent maintenance, long distances, and mountainous terrain cause HF radio communication to be unreliable in many parts of Alaska. In some places, HF communication problems were so acute that the functioning of the entire health care system was threatened.

ATS-1 Audio Experiments

In 1971, the Indian Health Service and the Lister Hill National Center for Biomedical Communication joined with the Na-

(Continued on page 2)

Tanzanian Campaigns Achieve Popular Participation

The United Republic of Tanzania has pioneered in developing methods to involve rural audiences in learning and action campaigns. In the following article, Clearinghouse Director Jock Gunter, looks at the ways in which the campaigns have developed to serve Tanzania's evolving philosophy of development.

In the "Arusha Declaration" of 1967, President Julius Nyerere re-examined existing policies favoring industrialization and British-style formal education. Some months later, the President's policy paper, *Education for Self-Reliance*, called for an educational system which could rapidly equip Tanzania's masses to develop a country that was — and would remain — rural and non-industrial. To meet this challenge, the government concentrated on developing an adult education field staff at the grass-roots level and named 1970 as Adult Education Year.

(Continued on page 4)

What's in a name . . .

The Information Center on Instructional Technology has changed both its name and its focus. As the Clearinghouse on Development Communication, we will be concerned with the role that all types of communication activities can play in solving development problems. *Development Communication Report* (formerly *ICIT Report*) will present interviews and articles on the ways in which communication has been and can be used in agriculture, health, nutrition, family planning, and other development areas. As always, we invite you to share your comments and ideas with our readers.

Telemedicine (Continued)

tional Aeronautics and Space Administration in an experiment using satellite radio to provide reliable, inexpensive communication to the remote health aides. The Applications Technology Satellite-1 (ATS-1) was used to provide voice-only communication between one of the field hospitals and 17 villages in that district. The ATS-1 uses small earth stations that are inexpensive, simple and rugged. Modified taxicab radios, powered by automobile batteries, transmit and receive through a ten-foot diameter metal mesh antenna.

The introduction of reliable communication by satellite produced some dramatic changes in the health care system.

- The number of contacts between doctors and health aides increased more than 400% in the first year of the experiment and continued to increase in the second year.
- Many more patients were treated with the benefit of a doctor's advice than had been the case before the satellite was made available.
- Health aides report that patients are more conscientious about following treatment plans and are more willing to come to health aides for care now that there is regular access to a doctor.
- Health aides also benefited from incidental learning by listening to conversations between the doctor and other aides.
- The telemedicine consultations led to improved capacity to handle emergency cases and to solve administrative and supply requests.

ATS-6 Video Experiments

After several years experience with the voice-only ATS-1 satellite, Alaska began a second experiment in satellite communication for health care. In 1974 a much more sophisticated and powerful satellite, ATS-6, was used in a one-year experiment to provide television communication between two remote clinics, a field hospital, and the referral hospital.

The two clinics selected for the ATS-6 demonstration were in larger than average communities (500 to 700 people), were staffed by more highly trained personnel (nurses and a physician's assistant), and had substantially more facilities and equipment (including X-ray equipment in one clinic) than were available to the health aides. These clinics also provided intermediate level care to native patients from surrounding villages.

For the experiment, the clinics were outfitted with television sending and receiving equipment, and with some additional diagnostic equipment, such as transmitting electrocardiographs and electronic stethophones. The video system was available for one hour three times per week and was used for consultations between the remote clinics and doctors at the field hospital, and for consultations

between doctors at the field hospital and specialists at the referral center.

The ATS-6 experiment demonstrated that useful consultations for practically any medical problem can be conducted over the video channel, but that cases where the visual information is absolutely critical to the diagnosis are rare. The vast majority of the cases could be handled (albeit occasionally with some inconvenience) over an audio-only channel. The video cases, which were slightly more complex than the radio cases, took an average of about 12 to 15 minutes to discuss, as compared with three minutes for the radio cases. Health care providers involved in the satellite video experiment generally felt that the video consultations improved the capabilities of the health care system, but questioned whether the improvement was worth the additional cost or inconvenience. They placed much stronger emphasis on the implementation of reliable audio channels, which they considered absolutely essential to the delivery of health care in rural Alaska.

Health Information System

At the same time that the ATS-6 experiment was implemented, a centralized medical record system, the Health Information System (HIS), was created to help overcome a severe problem in Alaska — patients often go to many different places for health care, with the result that their medical records are fragmented and scattered. The patients themselves usually do not know or cannot accurately describe the diagnosis or treatment that has resulted from visits to other health care providers and it is difficult to obtain medical records from all of the places they have visited.

The Health Information System is a centralized, computer-based system of problem-oriented records. Health care providers record each outpatient encounter on a special form and send a carbon copy to a central facility which adds the record to the individual patient's file stored in the computer system. Providers receive bi-weekly printouts of the records of the patients in their area.

Three main features of HIS are important.

- All of the providers in the program use a standard format for record-keeping, making it easier for providers to organize their own records and to use records made by others.
- All of the patient records are centralized so that a full patient record will be available to all of the providers in the system.
- Medical information in a patient's record is organized by medical problems rather than by visits to the doctor. Medical care providers found this type of organization to be much easier to use than a listing that summarized the patient's visits by date.

Conclusions

Experiments usually are short-term and may create a dependence on a service that will be withdrawn. In Alaska, the experimentation with satellite communication in health care has been closely tied with planning operational services to the rural areas. The experiment demonstrated that two-way communication is vital to the support of rural health care workers and that satellites can reliably and inexpensively provide such communication. These results have influenced the design of and probably have been a catalyst for the adoption of an operational system that will continue to provide the services offered by the experiment. A satellite-based telephone communication network for rural villages is now being implemented. The State of Alaska has purchased one hundred small ground stations for use with a commercial satellite. The long lines supplier in the state is installing and operating the stations, which will provide at least one public telephone circuit and one medical communication circuit. The circuit for medical communication will incorporate some of the important features of the experiments: "Doctor call" type services and the Health Information System will continue; the circuit will be "party-line" so that health aides can continue to learn by listening to other consultations; and, the system can be used for statewide health education broadcasts to the villages.

Several general conclusions about the application of telemedicine in rural areas and the use of satellite communication can be drawn from these experiments.

Telemedicine

- Telemedicine, whether by audio or video, can provide useful consultations for virtually any type of medical problem. Visual information is "absolutely critical" only in a very small proportion of cases. Video consultations are convenient for some applications, such as showing X-rays, but generally take longer, are more cumbersome, and cost considerably more than audio-only consultations.

- For all practical purposes, what can be done for patients in a telemedicine system in rural areas is limited by the facilities or skills available at the remote site, not by what can be accomplished over a communication channel.

- Some sort of emergency contact system for signaling the doctor is valuable; otherwise, scheduled contacts are more convenient for the doctor.

- Health care providers of all levels of skill can participate in useful consultations over both audio and video systems. Extensive medical training is *not* a requirement for effective communication. Rural health aides with little formal education and no more than 16 weeks of

medical training provided high quality care with the assistance of the telemedicine system.

- By having the community recruit its own health aide, problems of community acceptance and high staff turnover were greatly reduced.

- Health care providers found the Health Information System with its standardized record format and problem-oriented summaries of patients' medical histories to be a valuable part of the telemedicine system.

- It is important that telemedicine be integrated into an organized system of rural health care. Telemedicine cannot function productively unless its service is reliably available and is backed up by other elements of the system, such as the supply of medicines to rural health care centers, training for health care workers, and equipment maintenance.

- The telemedicine system must be supportive of rural health care, both in intent and in perception by the rural workers; a system the staff perceives as being used primarily for supervision and monitoring rather than as the source of a useful service is likely to be ignored or sabotaged.

- The scale of the activity must be such that the people involved feel personally responsible for the care that is provided. The remote health care provider should be responsible for a small enough area so that he or she can know most of the individuals and their problems, the physician consultant should be personally acquainted with all of the health care providers in his or her district and with many of the patients. This sense of personal responsibility is more important in a telemedicine system than in face-to-face care because communication is more difficult between levels of care providers, and across the socio-cultural boundaries that often coincide with them. When the verbal information the consulting doctor receives is ambiguous or inarticulate, personal familiarity with the care provider and the conditions in the community will help the doctor to interpret the information.

Satellite Communication

- Reliable communication can be provided via satellite. The equipment is capable of functioning under extreme environmental conditions and, because satellite technology need not be complex at the village level, it can be used by people who are not technical experts.

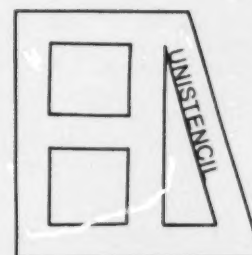
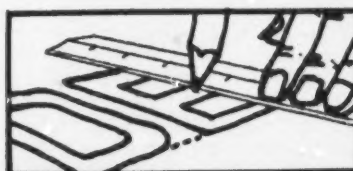
- Satellites can provide immediate service in rural areas. There is no need to wait for the terrestrial infrastructure of land lines and microwave to reach the rural areas from the cities.

- In many cases, satellite communication is a much cheaper way of extending communication services to rural areas than is expanding the terrestrial system.

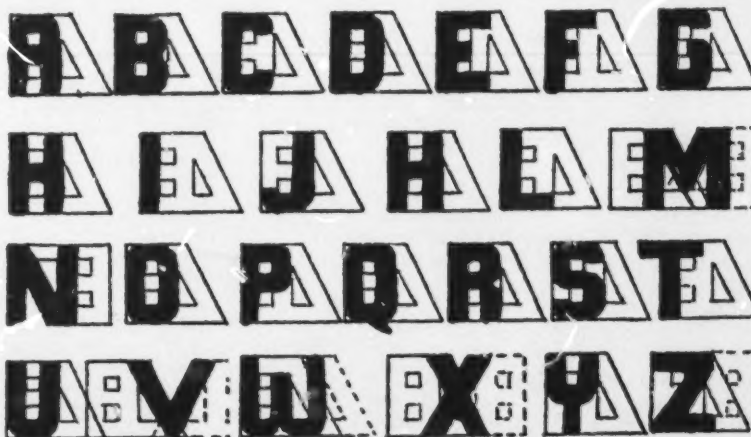
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Lindy Layer

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Additional information on the Alaskan Experiments and on telemedicine in general can be obtained from a number of sources. Evaluations of the ATS-1 and ATS-6 experiments were conducted by the Institute for Communication Research, Stanford University with the Stanford Medical School. The final report of the ATS-1 evaluation, *Health Care and Satellite Radio Communication in Village Alaska* (Kreimer, O., et al., Stanford, California: Institute for Communication Research, Stanford University 1974) is out-of-print but photocopies can be purchased from the National Technical Information Service (NTIS) 5285 Port Royal Road, Springfield, Virginia. "Medical Communication in Alaska by Satellite" (Hudson, H.E. and Parker, E.B., *New England Journal of Medicine*, 289:1351-1356, December 1973) is a good summary of the

initial ATS-1 research findings. Copies of *Telemedicine in Alaska: The ATS-6 Satellite Biomedical Demonstration* (Foote, D., et al., Stanford, California: Institute for Communication Research, Stanford University, 1976) can be obtained by writing to Dr. Edwin B. Parker, Institute for Communication Research, Stanford University, Stanford, California 94305.

Two good general works on telemedicine are: *Telemedicine: Explorations in the Use of Telecommunications in Health Care* (Bashshur, R.L., et al., Springfield, Illinois: Charles C. Thomas, 1975); and, *An Introduction to Telemedicine: Interactive Television for Delivery of Health Services* (Park, B., New York: The Alternate Media Center at New York University, June 1974). Persons wishing to contact Dennis Foote or Heather Hudson should write to them care of the Clearinghouse.

Tanzania (Continued)

By the beginning of 1970, multi-media methods had been used by institutions in two different regions of the country. The Cooperative Education Center at Moshi began teaching organizational skills to its members via radio study groups and correspondence "study letters" in 1967. These methods were based to a large extent on the study circles used by labor and cooperative education programs in Sweden. Within one year, some 400 study groups were participating in one or more of the courses offered at Moshi.

The Institute of Adult Education (then part of the University College of Dar es Salaam) also began a multi-media program in 1967. Civics, English, and agriculture were taught to 15 experimental radio groups. Canada's radio farm forum, which had already been used with some success in India and in several African countries, served as the model for this experiment.

In addition to these experiences, the government launched a series of nationwide campaigns on national economic issues (1969), national elections (1970), and the ten year anniversary of Tanzania's independence (1971). Radio programs and print materials were used to help study groups understand those national issues. The number of participating study groups increased from 60 in the 1969 campaign to 1700 in the 1971 campaign.

Each campaign built upon the experience of its predecessor so that experience in organizing instruction via various media, training group leaders and evaluating results accumulated and paved the way for the mass health and nutrition campaigns of 1973 and 1974 that would involve more than 75,000 study groups.

Man is Health

After the 1971 campaign, Tanzania undertook a larger scale campaign designed to create an awareness of specific health problems among the rural population, and to recommend actions which individuals and communities could take to remedy them. The campaign would also, as a secondary objective, provide suitable follow-up materials to graduates of the National Literacy Campaign. Thus, the *Man is Health* campaign would differ from previous efforts by virtue of its scale, its emphasis on action, and its integration with national literacy efforts.

The campaign had high-level political support. The national coordinating committee included representatives of Tanzania's single political party, the Tanzanian African National Union (TANU), and of many other government agencies: the Institute of Adult Education; the Health Education Unit, Ministry of Health; the Adult Education Directorate, Ministry of National Education; the Rural Development section of the Prime Minister's Of-

fice; and, Radio Tanzania. These organizations had the task of mobilizing the population, training and recruiting group leaders, developing content, producing radio programs and print materials, distributing print materials, and supervising the campaign.

Man is Health put great emphasis on publicity — Government officials at all levels were informed of the importance of the campaign; press releases announced each new stage in the campaign; radio spots were aired on educational and commercial radio; and, clothes bearing the campaign's logo were manufactured and distributed throughout the country.

The result of these efforts was a ten-week learning and action experience in which 2 million of Tanzania's 13 million people participated in 75,000 study groups. The results of the campaign were as follows:

- *The campaign succeeded in involving masses of rural people in learning and action at bearable cost.* Most of the costs of the campaign involved extra duties taken on by collaborating institutions under their existing budgets. The Swedish International Development Authority (SIDA) did provide a grant of US\$210,000, which went into paper, printing, and distribution of texts and study guides. Total costs for the campaign have been estimated at US\$0.47 per participant. (Hall and Dodds, 1974).
- *The campaign radically increased the spread of basic knowledge and information within the country.* In the health campaigns, study groups showed a 47% improvement between a pre-test and post-test on specific points of knowledge regarding health. By contrast, control groups which did not participate formally in the health campaign, showed 19% improvement on the same test. Researchers felt that control groups may also have been affected by the campaign.
- *The campaign stimulated behavior changes on the community and individual level.* The evaluation of the 1973 health campaign indicated that, in the 2,084 households sampled, specific changes (such as adding mosquito nets, constructing latrines, and clearing flies from households) could be attributed to the health campaign.
- *The campaign promoted grass-roots participation in government, and counteracted the compartmentalization of services promoted by bureaucracy.* Group leaders were trained as facilitators of dialogue rather than as sources of absolute truth. Organizers attempted to use simple language on the radio and in the printed materials. Officials from different government agencies were compelled to work together, to see others' perspectives, and to address the problems of rural Tanzania in an integrated way.

Food is Life

The nutrition campaign of 1975 was planned as a sequel to the campaign of 1973 and was designed to raise the level of functional literacy about the nutritional values of different foods and about ways to obtain a balanced diet on a limited budget; eliminate various food taboos and improper habits regarding food; encourage the use of good farming methods in order to increase the production of various types of food; and encourage cooperation in solving communal problems (Matiko, 1976).

The nutrition campaign required more direct cooperation from various institutions than did the health campaign. The campaign encouraged expectant mothers to use the prenatal clinics of the Ministry of Health and supported the establishment of day care centers by the Ministry of Social Welfare. Contributions from community agricultural plots to primary schools were also encouraged, as were improved nutrition programs in secondary schools and in factory canteens.

Tanzania's system of government changed between 1973 and 1975 to allow for more administrative control at the regional level. As a result, planning and administration of the 1975 campaign could not be conducted in the centralized fashion of the 1973 health campaign. Leaders in each region had to be convinced of the importance of the campaign relative to their other development priorities. Several observers feel that future campaigns should be conducted as regional rather than national events as an extension of the government's commitment to decentralization.

In 1975, evaluation was also decentralized as a matter of policy and philosophy. The leadership wanted communities to set their own objectives for the campaign and to monitor their own performance relative to those objectives.

In order to implement decentralized evaluation, regional seminars were held in 1974. Participants reported that they felt a sense of control over their learning groups, a feeling that was in harmony with the country's efforts at local self-reliance. During and after the campaign, it was difficult to collect data at a central point and in fact, all of the evaluation results are still not available. However, it is expected that losses in certain types of efficiency will be more than compensated for by heightened grass-roots involvement and control.

The following results of the 1975 campaign have been reported based on six sample areas:

- Increased consciousness of the need for more food production.
- Establishment of vegetable gardens and poultry units.
- Improved dietary habits.

- Creation of day care centers for infants.
- Some traditional taboos and bad practices about food have been abandoned.

Persistent Problems

In addition to their success, a number of lingering problems have plagued both the 1973 and 1975 campaigns. In many cases, study groups grew out of existing adult education classes that were much larger than the recommended size for effective dialogue. These adult education classes did not represent a cross-section of the community, but favored few literates. In addition, adult education teachers had difficulty in assuming the role of group discussion leader. Inadequate training of those group leaders who were not educators also proved to be a problem. In some areas, printed materials arrived late and in insufficient quantities. Participation levels were reduced due to scheduling conflicts with the general election, the villagization program, the national adult literacy exam, and the agricultural cultivation campaign.

Transferability

Questions are inevitably raised regarding the transferability of the Tanzanian experience to other contexts. An observer and a participant in the campaign, Budd Hall, has cited what he considers to be several circumstances in Tanzania that favored the development of effective campaigns:

- High-level political commitment to grass-roots oriented rural development.
- Strong national political support for adult education as a development tool.
- A political situation favoring interministerial cooperation.
- The decision to limit and focus the scope of campaign subject matters.
- Commitment to use all forms of local communication resources.
- The existence of a nation-wide adult education field staff extending to the grass-roots level.

Certainly, countries which lack these conditions would have great difficulty in mounting successful Tanzanian-style campaigns. However, to conclude that Tanzania's experiences were not "transferable" to countries with other political situations would be an error.

The real lessons to be derived from Tanzania are not to be learned from specific institutional structures that have been built on the educational methods or from the philosophy of development that has evolved. It is a more important lesson to recognize the benefits that derive from

asking basic questions about a country's situation and direction, and from expressing the resulting dialogue in action.

The outcome of such a process seems to be development efforts to which people are deeply committed. Other countries which undergo national dialogues such as that beginning with the "Arusha Declaration" may arrive at different philosophies of development and different methods for mass education. However, if they emerge from the exercise with the self-confidence, the candor and the openness found in those contributing to this survey, then the lesson of the Tanzanian campaigns will have been "transferred". ■

Many thanks to Rommel Mauma and Hilda Kokuhirwa, both of Tanzania's Institute of Adult Education (P.O. Box 20679, Dar es Salaam, TANZANIA) and to Budd Hall, Research Officer at the International Council for Adult Education (252 Bloor Street, W. Toronto, M5S 1V6, CANADA). Readers might also consult the following publications for more information:

Barrett, Hugh. "Health Education — A Campaign for Radio Study Groups in Tanzania", *Educational Broadcasting International*, June, 1974.

Barrett, Hugh. "Planning a National Mass Adult Education Campaign", Stanford International Conference on Communication Policy and Planning for National Development, Stanford University, Stanford, California 94305, 1976.

Hall, Budd and Dodds, Tony. *Voices for Development: The Tanzanian National Radio Study Campaigns*, International Extension College (8 Shaftesbury Rd., Cambridge, CB2 2BP, ENGLAND), 1974.

Matiko, J.M.N. "Communication Policy for Education and Development: The Tanzania Radio Campaigns", Stanford International Conference on Communication Policy and Planning for National Development, Stanford University, Stanford, California 94305, 1976.

Mbunda, D. "Education Mass Campaigns: The Tanzania Experience, 'Chakula Ni Uhai'", presented at the International Conference on Adult Education and Development, Dar es Salaam, TANZANIA, June, 1976.

An Evaluation of the 1973 Mass Health Education Campaigns in Tanzania, Planning and Research Department, Institute of Adult Education, University of Dar es Salaam, TANZANIA, June, 1974.

Clearinghouse Publications

The Clearinghouse on Development Communication has recently published two information bulletins. Information Bulletin Number Seven, *A Sourcebook on Radio's Role in Development*, is a bibliography of documents relating to the use of radio in education and development. Over six hundred entries have been organized into categories relating to type of document (project report, bibliography or discussion), issues (cost, policy, planning or innovation), and strategies (open broadcast, farm forum or radio school). Annotations or abstracts are provided for most of the entries and addresses for the sources of documents are listed in the appendix.

Information Bulletin Number Eight, *Tele-Niger: Adapting an Electronic Medium to A Rural African Context* is a synthesis and translation of ten volumes of research on the French-assisted educational television project in Niger. Although this project began in the early 1960's, very little information on the project has been available to English readers. While approaches to the use of media for development have changed, there are lessons to be learned from this project's commitments to rural-oriented learning.

The Information Bulletins are available without charge from the Clearinghouse on Development Communication. ■

WHO Radio Campaigns

The World Health Organization (WHO) Radio Unit wishes to cooperate with radio stations and networks throughout the world in initiating information/education programs designed to encourage community participation in public health campaigns.

The World-wide Expanded Program of Immunization is currently one of WHO's main activities. *Immunize and Protect your Child* will be the slogan for the next year's (1977) World Health Day. Programs will be designed to inform parents that vaccination can protect their children against such debilitating and killing diseases as diphtheria, tetanus, whooping cough, measles, tuberculosis and poliomyelitis — to the extent that the health authorities provide this service in the countries concerned.

The WHO Radio Unit is prepared to provide radio stations with ideas and material to help them compile a series of information/education programs to be broadcast in the course of the next year, preferably in close cooperation with the Ministry of Health in each country.

Broadcasting authorities in countries who would like to join these efforts are requested to contact: The Senior Radio Officer, WHO Radio Unit, Division of Public Information, World Health Organization, 1211 Geneva 27, SWITZERLAND. ■

Development Communication Report is a publication of the Clearinghouse on Development Communication, an international center for materials and information on important developments in the application of communication technology to development problems. The Clearinghouse is operated by the Academy for Educational Development, a nonprofit planning organization, and is supported by the Technical Assistance Bureau of the U.S. Agency for International Development, Washington, as a part of its program in educational technology and development communication. The views expressed in Clearinghouse publications are those of the author and not necessarily those of the Agency for International Development.

Confessions of a Rural Development Communicator

The following are excerpts from a letter by Lal Karamchandani of the Directorate of Extension, Ministry of Agriculture and Irrigation, Government of India. Mr. Karamchandani has been involved with communication and integrated rural development for the past two decades.

How do you communicate with a rural audience, or for that matter, rural audiences on a subject basic to their needs and in tune with national rural development strategies and goals?

All this assumes there is hard, solid, real information waiting to be communicated. But is this really so? There is a noticeable lack of quick, reliable, easy-flow channels for gathering information. Most of the hard information lies buried with scientists in the lab or in the field. Scientists, with a few notable exceptions, are either reluctant or unable to pass information on to the development communicator for wider dissemination.

On the other hand, there is a glut of publicity material, hand-outs, or whatever from the arm-chair scientists sitting in cozy, comfortable, insulated chambers, working on different wave lengths from hundreds of thousands of small farmers in dire need of simple, easy-to-adopt, practical research findings.

More often than not, the poor and hapless communicators are loaded with all sorts of material that policy planners want disseminated. For, to face the facts of life, it is planners who decide what is to be communicated, and, sometimes, even how it is to be communicated. Too often even the way material should be processed and the channels through which it should be disseminated are dictated by people who have, at best, a foggy idea of communication in rural settings.

This leads me to yet one more sad situation: the role played by communication researchers in advising about the channels to be preferred, the profile of the audience, etc. Sitting in ivory towers, fed with bookish knowledge (often imaginary or imported), these communication researchers feed the practitioners their half-baked ideas about the most effective timing, channels, and types of messages to be communicated — that is, if they condescend to communicate with poor practitioners at all.

No development support communication strategy or research not indigenous to the country can be adopted or even adapted with any reasonable hope of its being workable, much less successful. I would even go farther than that. In a country like India, no single communication strategy, no matter how effectively designed and employed, can ever reach the teeming masses living in half a million far-flung villages.

All these factors, big and small, land the poor development support communicator in a communication jungle, leaving him no other alternative but to fall back on the fundamentals — his own intuition and field experience. What may sound like a trial and error method is the only way he finds out the type of audiences he has to cater to, the type of information materials they can assimilate, and the channel-message mix that has a reasonable chance of getting bureaucratic clearance, financial support, and channel availability.

We know that in every developing country, there is a terrific pressure on communication resources. But not many people are aware that in the scramble for those elusive resources, the hardest hit is the developmental communicator. Priority is given to the publicity, public relations, and propaganda people, and seldom to the unspectacular development communicators.

Day in and day out the communicator is told that two media are better than one, and three are still better in getting the message across, or that spoken and picture words are better than the printed word. So the poor development communicator tries his hand at disseminating the messages through spoken and picture words, if he can ever get his hands on these channels. But he faces a problem of the lack of basic communication facilities and equipment, not to say of sophisticated equipment. It is either just not there or, if there, it is out of reach or out of order.

So the poor communicator has to fall back on the good old tried communication channels which depend upon the printed word. And that is the beginning of his troubles! Because the literacy rate is low, the communicator has to find a suitable vocabulary that will present his message in a simple yet effective style to the target audience. This is easier said than done. What may look simple on paper may often turn out to be an altogether different and difficult proposition even when communicating with a limited primary target, such as the 75,000 field level extension workers who work with untold millions of illiterate farmers on all parts of the sub-continent. Not only do the interests and specialties of the audience differ, but so do their abilities to grasp what is offered to them, a factor which cannot be accurately pin-pointed. We are still in the dark as to how much information an extension worker in a village can absorb, or as to how to make the most of the messages sent to him either through district, state, or national headquarters. Perhaps this could form a field in which research could be directed to find out the communication profile of an extension worker.

These are problems a typical rural development communicator faces day in and day out. ■

Development Communication Report

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